

West Nile Virus General Information

What is West Nile virus?

West Nile virus is a virus that lives in some birds and may be transmitted to people by mosquitoes. The virus can cause a broad variety of symptoms including encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord); encephalitis and meningitis can also be caused by head injury, bacterial infections or most commonly other viral infections.

How do people get the virus?

West Nile virus is spread to humans by the bite of an infected mosquito. Biting a bird that carries the virus infects a mosquito. You or your child cannot get West Nile virus from a person who has the disease. West Nile virus is not spread by person-to-person contact such as touching, kissing, or caring for someone who is infected.

Can you get West Nile virus directly from birds?

West Nile virus cannot spread directly from birds to people. However, dead birds should not be handled with bare hands. If a dead bird must be handled, use a shovel or gloves to carefully place dead birds in a double plastic bag and then place the dead birds in the outdoor trash.

Besides Mosquitoes, can you get West Nile virus directly from other insects or ticks?

Infected mosquitoes are the primary source for West Nile virus transmission to humans. There is no information to suggest that ticks transmitted West Nile virus to patients in the New York City area outbreak.

Do birds naturally infected with the virus die or become ill?

In the 1999 outbreak and with the current information for year 2000, large numbers of North American crows were observed becoming seriously ill and dying. Numerous other species of birds can get the infection but usually do not die because of it.

Can other animals get sick?

Since the outbreak began in New York City, sick and dead cats, crows and horses were laboratory confirmed as being infected with the virus. In addition, dogs, chickens, ducks, geese, turkeys and many other species of wild and domestic birds, while not clinically ill tested positive for West Nile virus antibodies, thereby, demonstrating they had been infected.

Where did the West Nile virus come from?

Outbreaks of the West Nile virus have occurred before in Egypt, Asia, Israel, South Africa, parts of Europe and Australia. Before 1999, the West Nile virus had never before been found in the United States. Plausible explanations are that an imported infected bird or an infected human returning from a country where the virus is common introduced the virus.

Where has the virus been found?

In 1999 laboratory confirmed West Nile virus in mosquitoes or birds was reported in New Jersey, New York and Maryland (Baltimore). In the year 2000, reports of infected mosquitoes have been received from New York, New Jersey, Massachusetts and Connecticut; infected birds have been reported from all New England States except Maine.

What are the symptoms of West Nile virus?

Most people who get infected with West Nile virus have no symptoms at all; some can experience mild illness such as a fever, headache and body aches before fully recovering. In outbreaks in other parts of the world, some persons also developed mild rash or swollen lymph glands. In some individuals, particularly the elderly, West Nile virus can cause serious disease that affects brain tissue. At its most serious, it can cause permanent neurological damage and can be fatal. Encephalitis (inflammation of the brain) symptoms include the rapid onset of severe headache, high fever, stiff neck, confusion, loss of consciousness (coma), and muscle weakness. Death may result in some cases.

Is a woman's pregnancy at risk if she becomes infected with West Nile Virus?

There is no documented evidence that a pregnant woman or the fetus are at increased risk due to infection with West Nile Virus.

How are West Nile infection and West Nile encephalitis treated?

There are no specific therapies. In more severe cases, intensive supportive therapy is indicated, i.e., hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (ventilator) if needed, prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.

Is there a vaccine against West Nile virus?

No.

How long does it take to get sick if bitten by an infected mosquito?

Being bitten by an infected mosquito will not necessarily make you sick since most people who are infected with West Nile virus have no symptoms or experience mild illness. If illness were to occur, it would occur within 5 to 15 days of being bitten by an infected mosquito.

I've gotten a mosquito bite. Should I be tested for West Nile virus?

No. Even in areas where West Nile Virus has been detected most mosquitoes are not infected, and currently in New Hampshire their presence has not been reported. Illnesses related to mosquito bites are rare, especially in New Hampshire. However, you should see a doctor immediately if you develop symptoms such as high fever, confusion, muscle weakness, severe headaches, stiff neck, or if your eyes become sensitive to light. Patients with mild symptoms should recover completely, and do not require any specific medication or laboratory testing.

What should a person do if he/she thinks they have West Nile encephalitis?

If a person has signs of encephalitis, with fever, muscle weakness, and confusion, he or she should seek medical care as soon as possible.

Who is at risk for getting West Nile encephalitis after being bitten by an infected mosquito?

Persons older than 50 years of age have the highest risk of severe disease.

What can I do to reduce my risk of becoming infected with West Nile virus?

From April to October, when mosquitoes are most active, take the following precautions:

- If outside during evening, nighttime and dawn hours when mosquitoes are most active and likely

to bite, children and adults should wear protective clothing such as long pants, long-sleeved shirts, and socks.

- If outside during evening, nighttime and dawn hours, consider the use of an insect repellent containing 10% or less DEET (N, N-diethyl-methyl-meta-toluamide) for children and no more than 30% DEET for adults.

Use DEET according to manufacturer's directions:

- Do not use DEET on infants or pregnant women.
- Do not allow young children to apply DEET themselves.
- Do not apply DEET directly to children. Apply to your own hands and then put it on the child.
- DEET is effective for approximately four hours. Avoid prolonged or excessive use of DEET. Use sparingly to cover exposed skin and clothing.
- Wash all treated skin and clothing after returning indoors.
- Store DEET out of reach of children.
- Vitamin B, ultrasonic devices, incense and bug zappers have not been shown to be effective in prevention mosquito bites.

What is being done to address the possible presence of West Nile virus?

The Manchester Health Department, the New Hampshire Department of Health and Human Services, along with other City, State and Federal agencies, has developed a plan to assess for the presence of West Nile virus and to find and control the kind of mosquitoes known to carry the virus. This plan includes trapping and testing mosquitoes in selected areas throughout the state, testing dead birds and other animals, and human surveillance.

For more information about West Nile virus, call the Manchester Health Department at 624-6466 or the NH Department of Health and Human Services, West Nile Virus Information Line at 1-866-273-6453.